

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A plasma enhanced method for fabricating a film, comprising:

introducing a gas mixture of a noble gas and reactant gas into a chamber; and supplying an electrical energy to a gas mixture such that a noble gas plasma is produced and that noble gas radicals and ions subsequently collide with the reactant gas to form reactant gas radicals and ions to form a plasma of the reactant gas, which enable the plasma to be formed under a pressure of 90 kPa to 110 kPa, the electric energy being applied between electrodes to form the plasma, the distance between the electrodes being less than 5 mm,

the reactant gas radicals and ions reacting to form the film.

2. (Original) The method of claim 1, said energy being supplied to the gas mixture by electric power in a frequency range of 1 kHz to 100 MHz.

3. (Original) The method of claim 1, one of helium, argon, neon krypton, xenon or one of a mixture of at least two chosen from a group consisting of helium, argon neon, krypton and xenon being used as noble gas.

4. (Original) The method of claim 1, temperature of the substrate on which said film is to be formed being in a range of 25 to 500°C.

5. (Original) The method of claim 1, the film being silicon dioxide or having a composition close to silicon dioxide.

6. (Original) The method of claim 1, the film being silicon nitride or having a composition close to silicon nitride.

7. (Original) The method of claim 1, the film being one of a silicon film, a doped silicon film, and a hydrogenated-silicon film.

8. (Original) The method of claim 1, the film being one of a metal and an alloy film.

9. (Original) A semiconductor device comprising a film fabricated according to the method of claim 1.

10. (Original) The semiconductor device of claim 9, the semiconductor device being one of a metal oxide semiconductor field effect transistor device, a thin film transistor, and a silicon on insulator device.

11. (Original) The semiconductor device of claim 9, the semiconductor device being a photovoltaic device.

12. (Original) An electro-optical apparatus comprising the semiconductor device of claim 9.

13. (Original) A memory device comprising a film fabricated according to the method of claim 1.

14. (Original) The memory device of claim 13, the memory device being one of a metal oxide semiconductor field effect transistor device, a thin film transistor, and a silicon on insulator device.

15. (Original) The memory device of claim 13, the memory device being a photovoltaic device.

16. (Currently Amended) A plasma enhanced method for fabricating a film, comprising:

introducing a gas mixture of a noble gas and reactant gas into a chamber; and supplying an electrical energy to a gas mixture such that a noble gas plasma is produced and that noble gas radicals and ions subsequently collide with the reactant gas to

form reactant gas radicals and ions to form a plasma of the reactant gas, which enable the plasma to be formed under a pressure of 1 kPa to 110 kPa, the electric energy being applied between electrodes to form the plasma, the distance between the electrodes being less than 5 mm,

the reactant gas radicals and ions reacting to form the film.

17. (Currently Amended) A plasma enhanced method for fabricating a film, the method comprising:

supplying optical energy with a light of wavelength less than 200 nanometer to a mixture of noble gas and reactant gas to form a plasma and create reactive species, the reactive species forming a film on a substrate, the optical energy being used for producing noble gas radicals and ions, the noble gas radicals and ions being excited by the optical energy and colliding with the reactant gas to form the plasma.

18. (Original) A semiconductor device comprising a film fabricated according to the method of claim 17.

19. (Original) A memory device comprising a film fabricated according to the method of claim 17.

20. (Currently Amended) A plasma enhanced method for fabricating a semiconductor device, comprising:

a step of forming a film by:

introducing a gas mixture of a noble gas and reactant gas into a chamber; and supplying an electrical energy to a gas mixture such that a noble gas plasma is produced and that noble gas radicals and ions subsequently collide with the reactant gas to form reactant gas radicals and ions to form a plasma of the reactant gas, which enable the plasma to be formed under a pressure of 90 kPa to 110 kPa, the electric energy being applied

between electrodes to form the plasma, the distance between the electrodes being less than 5 mm.

the reactant gas radicals and ions reacting to form the film.

21. (Currently Amended) A plasma enhanced method for fabricating a memory device, comprising:

a step of forming a film by:

introducing a gas mixture of a noble gas and reactant gas into a chamber; and

supplying an electrical energy to a gas mixture such that a noble gas plasma is produced and that noble gas radicals and ions subsequently collide with the reactant gas to form reactant gas radicals and ions to form a plasma of the reactant gas, which enable the plasma to be formed under a pressure of 90 kPa to 110 kPa, the electric energy being applied between electrodes to form the plasma, the distance between the electrodes being less than 5 mm,

the reactant gas radicals and ions reacting to form the film.

22. (Canceled).